

TITLE

SOYBEAN PLANT PRODUCING SEEDS WITH REDUCED LEVELS
OF RAFFINOSE SACCHARIDES AND PHYTIC ACID

ABSTRACT OF THE DISCLOSURE

5 A soybean enzyme, *myo*-inositol 1-phosphate synthase, whose manipulation
results in the alteration of raffinose saccharide, sucrose, phytic acid and inorganic
phosphate content of soybean seeds, thus leading to valuable and useful soybean
products, has been identified. Soybean lines with decreased capacity for the synthesis
10 of *myo*-inositol 1-phosphate in the tissue of developing seeds in comparison to seeds
of other soybean lines, have been developed. As taught herein, reduction of
myo-inositol 1-phosphate synthase enzymatic activity by any of several means will
result in soybean seeds displaying this desirable phenotype.

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